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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,945	03/19/2004	Kenichi Shimooka	TSM-37	7176

24956 7590 03/01/2007  
MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.  
1800 DIAGONAL ROAD  
SUITE 370  
ALEXANDRIA, VA 22314

EXAMINER
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PERUNGAVOOR, VENKATANARAY

ART UNIT	PAPER NUMBER
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2132

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/01/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/803,945

Applicant(s)

SHIMOOKA ET AL.

Examiner

Venkat Perungavoor

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7,9-17,19 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7,9-11,14-17,19 and 21-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>200702162</u> .                          |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application  |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                           |

## **DETAILED ACTION**

### ***Response to Arguments***

The Applicant's arguments filed on 12/14/2006 are not persuasive. As Kuznetsov(US Patent 5483649) discloses memories(fig. 9 item 122,156,124,126,128,130) further including these memories connected to a hard disk(item 32), where the hard disk sends data through the bus(52) into the memories. And the memories and hard disk are all part of a larger system. The hard disk controller(30) controls access to hard disk(32) so that data, addresses or control information can be passed from the memories to hard disk and vice versa. The *pair* of memories, the Examiner interprets it as memories that share the same characteristics(i.e. same capacity), and this is met by memories 122 & 130, as an example.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 102***

Claims 7, 9-11, 14-17, 19, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,483,649 to Kuznetsov et al.(hereinafter Kuznetsov).

Regarding Claim 7, 10, 11, Kuznetsov discloses the data protection apparatus with a computer system having a storage volume(Fig. 1 item 32), a control unit for controlling communication between storage volume(Fig.1 item 30) and second volume see Col 16 Ln 14-16) that is a pair of memories, a event detection unit for detecting event occurrence(Col 6 Ln 20-47 & Fig. 1 item 120A), a replication stopping unit for stop

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communication between computer and storage volume(Col 5 Ln 36-45 & Col 4 Ln 16-23 & Fig. 1 item 120B & Col 1 1 Ln 42-64), the illegal intrusion detection unit for detecting illegal intrusion(Fig. 1 item 135, 137, 139 & Col 16 Ln 26-Col 17 Ln 9), further the event detection unit(see Fig.1 item 120A) receiving the detection of intrusion from illegal intrusion detection unit and the replication stopping unit stops the communication from computer and storage volume(Fig. 1 item 120). And further discloses first, second memory see Col 15 Ln 65- Col 16 Ln 1. The pairing of memories is illustrated by Kuznetsov in way of multiple memories being part of module see Fig. 2 item 20B. Further yet, Kuznetsov discloses the copying of register values and program stack see Fig. 7A, which is axiomatic of replication where the data is copy from the kernel and hard disk(32), replicated into memories(156) for retrieval afterward see Fig. 7D item "Restore Register Values". And see arguments above.

Regarding Claim 9, Kuznetsov discloses the computer system virus detection unit detecting viruses in storage see Abstract & Col 15 Ln 30-64, event detection unit receiving detection form computer virus detection unit see Fig. 1 item 120A, and replication stopping unit to stop communication upon detection of virus see Fig. 1 item 120.

Regarding Claim 14, Kuznetsov discloses the data protection apparatus with a computer system having a storage volume(Fig. 1 item 32), a control unit for controlling communication between storage volume(Fig.1 item 30) and second volume(see Col 16

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Ln 14- 16), a event detection unit for detecting event occurrence(Col 6 Ln 20-47 & Fig. 1 item 120A), a replication stopping unit for stop communication between computer and storage volume(Col 5 Ln 36-45 & Col 4 Ln 16-23 & Fig. 1 item 120B & Col 11 Ln 42-64), the illegal intrusion detection unit for detecting illegal intrusion(Fig. 1 item 135, 137, 139 & Col 16 Ln 26-Col 17 Ln 9), further the event detection unit(see Fig. 1 item 120A) receiving the detection of intrusion from illegal intrusion detection unit and the replication stopping unit stops the communication from computer and storage volume(Fig. 1 item 120), the alteration detection unit for detecting the differences between log data see Col 17 Ln 25-43 and further the use of registers for restoring values see Col 20 Ln 49-65. And further discloses first, second memory see Col 15 Ln 65- Col 16 Ln 1. The pairing of memories is illustrated by Kuznetsov in way of multiple memories being part of module see Fig. 2 item 20B. Further yet, Kuznetsov discloses the copying of register values and program stack see Fig. 7A, which is axiomatic of replication where the data is copy from the kernel and hard disk(32), replicated into memories(156) for retrieval afterward see Fig. 7D item "Restore Register Values". See Arguments above.

Regarding Claim 15, Kuznetsov discloses the delay of time between writing to second volume from storage volume see Col 22 Ln 40-63(the use of flip-flops introduces delay).

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Regarding Claim 16, Kuznetsov discloses the plurality of memories see Col 15 Ln 12-17 & Col 15 Ln 66-Col 16 Ln 1 & Fig. 9 item 126, 122, 128, 156; and the switching of writing destination at time intervals see Fig. 9 item 30.

Regarding Claim 17, Kuznetsov discloses the transferring of data to another storage see Fig. 9 item 152.

Regarding Claim 19 see Claim 14 above and Claim 7 above.

Regarding Claim 21, 23, 25, 27, Kuznetsov discloses the stopping and canceling data transfer see Col 14 Ln 43-49 & Col 13 Ln 56-64.

Regarding Claim 22, 24, 26, 28, Kuznetsov discloses the stopping and blocking access to memory as well see Col 11 Ln 2-14.

### ***Conclusion***

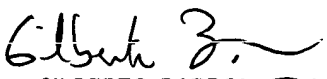
**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date

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the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Venkat Perungavoor whose telephone number is 571-272-7213. The examiner can normally be reached on 8:30-5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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